

**IN THE CLAIMS:**

1. (Currently Amended) A medical apparatus guiding system comprising:  
~~a medical apparatus having~~ a medical apparatus main body adapted to be  
inserted in ~~[[the]]~~ a body cavity and having an approximately cylindrical outer shape;  
a thrust generating mechanism including a spiral structure portion provided on  
a side surface of the medical apparatus main body and a rotation driving unit for rotating the  
spiral structure portion around a substantially cylindrical shaft of the medical apparatus main  
body, wherein the rotation driving unit includes:  
a magnet provided arranged to the medical apparatus main body and arranged  
with a magnetic pole direction oriented toward a direction substantially perpendicular to the  
substantially cylindrical shaft of the medical apparatus main body; and  
a magnetic field generating device for generating a magnetic field in an  
arbitrary direction;  
an information providing unit comprising at least one of a storing unit for  
storing a state an advancing direction of the thrust generating mechanism medical apparatus,  
[[and]] a direction detecting unit for detecting the direction of the medical apparatus main  
body, and magnetic pole detecting means for detecting a direction of a magnetic pole of the  
magnet;  
an input unit which supplies a signal indicating instructs a thrust generating  
direction of the thrust generating mechanism; and  
a control unit which changes repeatedly performs, at every predetermined  
control cycle, a control for generating a thrust rotating magnetic field from the magnetic field  
generating device and generating, from the magnetic field generating device, a rotating

magnetic field for changing a direction ~~[[state]]~~ of the ~~thrust generating mechanism~~ medical apparatus main body, based on information from the information providing unit and the input unit.

2. (Original) A medical apparatus guiding system according to Claim 1, wherein the control unit continuously changes the thrust generating state of the thrust generating mechanism.

3. (Currently Amended) A medical apparatus guiding system according to Claim 1, wherein the input unit ~~is an input unit which~~ inputs ~~[[the]]~~ a change amount of the thrust generating mechanism in the thrust generating direction.

4. (Canceled)

5. (Currently Amended) A medical apparatus guiding system according to Claim 1, wherein the input unit is an input unit which inputs ~~[[the]]~~ a thrust generating amount of the thrust generating mechanism.

6. (Currently Amended) A medical apparatus guiding system according to Claim 1, wherein the input unit has an automatic return mechanism ~~which automatically returns the operation amount to zero upon stopping the operation.~~

7. (Canceled)

8. (Currently Amended) A medical apparatus guiding system according to Claim 1, wherein the medical apparatus main body has a diagnosis/cure device ~~such as is selected from a group consisting of~~ a medication system ~~[[or]]~~ and a body fluid extracting system.

9. (Original) A medical apparatus guiding system according to Claim 1, wherein the medical apparatus main body is a capsule medical apparatus.

10-11. (Canceled)

12. (Currently Amended) A medical apparatus guiding system according to Claim 5, wherein the thrust generating mechanism has ~~[[any]]~~ at least one device selected from a group consisting of a magnetic field generating device, an electric field generating device, and a motor, and the thrust generating amount is controlled by any of a frequency of a rotating magnetic field, a frequency of a rotating electric field, and a rotating frequency of the motor, and any combination of devices thereof.

13. (Currently Amended) A medical apparatus guiding system according to Claim 3, further comprising: an image pick-up device arranged to the medical apparatus main body; a display device which displays an image picked up by the image pick-up device; and an interface which allocates ~~[[the]]~~ an operating direction of the input unit to the up, down, right, and left sides of the image displayed on the display device,

the medical apparatus guiding system further comprising image rotation correcting means which cancels the rotation of the image generated upon rotating the medical apparatus main body by the rotating magnetic field,

wherein the image processed by the image rotation correcting means is displayed on the display means.

14. (Currently Amended) A medical apparatus guiding system according to Claim 3, further comprising: an image pick-up device arranged to the medical apparatus main body; a display device which displays an image picked up by the image pick-up device; and an interface which allocates ~~[[the]]~~ an operation direction of the input unit to the up, down, right, and left sides of the image displayed on the display device.

15. (Original) A medical apparatus guiding system according to Claim 4, wherein the input unit is an input unit which inputs a rotating frequency of the rotating magnetic field generated by the magnetic field generating device.

16. (Original) A medical apparatus guiding system according to Claim 4, wherein the input unit is an input unit which inputs a rotating direction of the rotating magnetic field generated by the magnetic field generating device.

17. (Currently Amended) A medical apparatus guiding system according to Claim 4, wherein the input unit is an input unit which inputs ~~[[the]]~~ a change amount of the direction of the rotating magnetic field generated by the magnetic field generating device.

18. (Currently Amended) A medical apparatus guiding system according to Claim 4, further comprising: an image pick-up device arranged to the medical apparatus main body; a display device which displays an image picked up by the image pick-up device; and an interface which allocates ~~[[the]]~~ an operation direction of the input unit to the up, down, right, and left sides of the image displayed on the display device.

19. (Currently Amended) A medical apparatus guiding system according to Claim 4, further comprising: an image pick-up device arranged to the medical apparatus main body; a display device which displays an image picked up by the image pick-up device; an interface which allocates ~~[[the]]~~ an operation direction of the input unit to the up, down, right, and left sides of the image displayed on the display device; and image rotation correcting means which cancels the rotation of the image generated upon rotating the medical apparatus main body by the rotating magnetic field, wherein the image processed by the image rotation correcting means is displayed on the display device.

20. (Currently Amended) A medical apparatus guiding system according to Claim 4, wherein upon changing [[the]] a rotating frequency of the medical apparatus main body, the control unit continuously changes the rotating frequency of the rotating magnetic field.

21. (Original) A medical apparatus guiding system according to Claim 4, wherein upon changing the strength of the magnetic field generated from the magnetic field generating device, the control unit controls strength of the magnetic field so that it is continuously changed.

22-23. (Canceled)

24. (Currently Amended) A medical apparatus guiding system according to Claim 4, wherein the information providing unit comprises at least two or more of the storing unit, the direction detecting unit, and the magnetic pole detecting means, and the control unit changes the information providing unit ~~referred to~~ based on the control history.

25-42. (Canceled)

43. (Original) A medical apparatus guiding system according to Claim 11, wherein the thrust generating mechanism is a motor.

44. (Original) A medical apparatus guiding system according to Claim 11, further comprising: a power supply unit which is extracorporeally arranged; and a power transmitting unit which connects the power supply unit and the thrust generating mechanism.

45-51. (Canceled)

52. (Withdrawn) A control method of a medical apparatus guiding system comprising:

a step of reading an instructing signal in a thrust generating direction;

a step of obtaining a control signal of a thrust generating mechanism until an arbitrary time;

a step of writing, to a storing unit, a state of the thrust generating mechanism after the arbitrary time; and

a step of transmitting the control signal to the thrust generating mechanism and driving the thrust generating mechanism.

53. (Withdrawn) A control method of a medical apparatus guiding system according to Claim 52, further comprising:

a step of reading, from the storing unit, the state of the thrust generating mechanism;

a step of reading the instructing signal in the thrust generating direction;

a step of obtaining the control signal of the thrust generating mechanism until the arbitrary time;

a step of writing, to the storing unit, the state of the thrust generating mechanism after the arbitrary time; and

a step of transmitting the control signal to the thrust generating mechanism and driving the thrust generating mechanism.

54. (Withdrawn) A control method of a medical apparatus guiding system according to Claim 53, wherein at the time at which the control signal is transmitted to the thrust generating mechanism and the thrust generating mechanism is driven,

the step of reading the state of the thrust generating mechanism from the storing unit is restarted.

55. (Withdrawn) A control method of a medical apparatus guiding system according to Claim 52, further comprising:

- a step of detecting the direction of the medical apparatus main body;
- a step of reading the instructing signal in the thrust generating direction;
- a step of obtaining the control signal of the thrust generating mechanism until the arbitrary time; and
- a step of transmitting the control signal to the thrust generating mechanism and driving the thrust generating mechanism.

56. (Withdrawn) A control method of a medical apparatus guiding system according to Claim 55, wherein at the time at which the control signal is transmitted to the thrust generating mechanism and the thrust generating mechanism is driven,

- the step of detecting the direction of the medical apparatus main body is restarted.

57. (Withdrawn) A control method of a medical apparatus guiding system according to Claim 52, further comprising:

- a step of detecting the direction of the medical apparatus main body;
- a step of reading an input signal from the input unit;
- a step of obtaining a magnetic field generating signal until the arbitrary time, which is generated by the magnetic field generating device based on the direction of the medical apparatus main body and the input signal from the input unit; and
- a step of transmitting the magnetic field generating signal to the magnetic field generating device and driving the thrust generating device.

58. (Withdrawn) A control method of a medical apparatus guiding system according to Claim 57, wherein during the step of transmitting the magnetic field generating signal to the magnetic field generating device and driving the magnetic field generating device, the step of detecting the direction of the medical apparatus main body is restarted.

59. (Withdrawn) A control method of a medical apparatus guiding system according to Claim 52, further comprising:

a step of detecting the direction of the medical apparatus main body;

a step of detecting the direction of a magnetic pole of a magnet arranged to the medical apparatus main body;

a step of reading an input signal from the input unit;

a step of obtaining a magnetic field generating signal until the arbitrary time, which is generated by the magnetic field generating device based on the direction of the medical apparatus main body, the direction of the magnetic pole of the magnet arranged to the medical apparatus main body and the input signal from the input unit; and

a step of transmitting the magnetic field generating signal to the magnetic field generating device and driving the magnetic field generating device.

60. (Withdrawn) A control method of a medical apparatus guiding system according to Claim 59, wherein during the step of transmitting the magnetic field generating signal to the magnetic field generating device and driving the magnetic field generating device,

the step of detecting the direction of the medical apparatus main body is restarted.



61. (Withdrawn) A control method of a medical apparatus guiding system according to Claim 52, further comprising:

- a step of reading the state of the magnetic field generating device from the storing unit;
- a step of detecting the direction of the medical apparatus main body;
- a step of detecting the direction of a magnetic pole of a magnet arranged to the medical apparatus main body;
- a step of reading an input signal from an input unit;
- a step of obtaining a magnetic field generating signal until the arbitrary time, which is generated by the magnetic field generating device based on the direction of the medical apparatus main body, the direction of the magnetic pole of the magnet arranged to the medical apparatus main body and the input signal from the input unit;
- a step of storing the state of the magnetic field generating device after the arbitrary time to the storing unit; and
- a step of transmitting the magnetic field generating signal to the magnetic field generating device and driving the magnetic field generating device.

62. (Withdrawn) A control method of a medical apparatus guiding system according to Claim 61, wherein during the step of transmitting the magnetic field generating signal to the magnetic field generating device and driving the magnetic field generating device, the step of detecting the direction of the medical apparatus main body is restarted.